



PAKISTAN
MSCC 2000



R/C Reconnaissance and Surveillance Gaps

Arabian Sea

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Overview

- Vision Statement
- Operational Processes
- Gaps



Vision Statement

- Strategic Plan for USPACOM TC Forecasting and Warning System
 - TC Reconnaissance and Surveillance:
“Provide the typhoon forecaster, and numerical prediction models, with the most accurate, timely, and reliable diagnosis of tropical cyclone structure and the surrounding environment.”



Vision Statement

- Apply Vision into nine key result areas
 - Data Collection
 - Analysis
 - Forecast
 - Tailored Applications
 - Dissemination/Communication
 - Technology
 - JT Organization/Personnel
 - Training
 - Feedback
- Operational Processes
- Supporting Areas



Operational Processes

- Primarily Two Operational Processes
Apply:

Data Collection and Analysis

1 . Data Collection. Overall Objective:

Increase the type, quality, and quantity of value added in-situ and **remotely sensed** data to exploit traditional and non-traditional data for METOC applications.



Operational Processes Data Collection (cont'd)



- MGUSPACOM GOALS:
 1. Identify and prioritize reconnaissance and surveillance deficiencies and requirements.
 2. Leverage and exploit international sources.
 3. Cost effective.



Operational Processes Analysis



- Primarily Two Operational Processes Apply:

Data Collection and Analysis

2. Analysis. Overall Objective:

Ensure high fidelity analysis of the atmosphere as it relates to TC forecasting.



Current Operations Gaps

(per Strategic Plan; Appendix B)



- Data ("A" priority)
 - TC Structure/Position/Intensity/Wind Fields
 - SSMI/TRMM/VIRS/RADAR/SCATT/UW-CIMSS Cloud Track Winds & Shear
 - ODT Implementation
 - AMSU
 - Timeliness
 - SSMI/TRMM, QuikSCAT, MET-5
- Process / Interpretation
 - Satellite Network
 - M4BP³I (Andersen, Kadena, Hickam, Elmendorf & Lajes)
 - Yongsan RADAR only
 - Enhanced KWBC/CPHC/AFWA Coordination
 - Manpower
 - M4BP³I billets (RODN/PHIK)
 - Hardware/software
 - SIDAS, M4BP³I, NSDS-E, & T1 lines



Current Operations Gaps

(per Strategic Plan; Appendix B)



- Process / Interpretation (cont'd)
 - Training
 - Internal program
 - Training websites (JTWC, NRL, CIMSS)
 - MSC Conference training
 - CPHC/Network sites
- Exploitation
 - R&D focus on the operator
 - Implementation of IR ODT
 - PMW intensity standard (ODT)
 - Scatt rain sensitivities
 - Doppler surface wind speed extrapolation
 - Update Dvorak procedures
 - AMSU Intensities (T_B)
 - Improve coordination with research community
- Other
 - Data fusion platforms: ATCF/OPSII (SIDAS)



Summary

- Vision Statement
- Operational Processes
- Gaps